

SERVICE BULLETIN**SB20-01**

Contains Useful Information Pertaining To Your Aircraft Engine

SUBJECT: Fuel Screen Assembly, Scheduled Maintenance**PURPOSE:** Augment current scheduled maintenance instructions**COMPLIANCE:** During the 100-Hour/Annual Inspection**MODELS****AFFECTED:** All Continental Aerospace Technologies new and rebuilt aviation gasoline (AvGas) engines equipped with throttle and control assemblies (reference Table 1).**I. GENERAL INFORMATION**

Continental Aerospace Technologies™ (Continental®) aircraft engine fuel injection systems equipped with throttle and control assemblies (see Figure 1 on page 3) feature a cleanable fuel screen assembly. The throttle and control assembly may be covered with a shroud.

This Service Document is provided to supplement and/or amplify Continental's Instructions for Continued Airworthiness (ICAs) as provided in the engine's Maintenance and Overhaul Manual and applicable Service Documents.

II. SCOPE

Continental engines equipped with a throttle and control assembly (see Figure 2 on page 4) use a fuel screen assembly and are affected by this service document. Continental engines equipped with a metering assembly that is integral to the air throttle body (see Figure 3 on page 4) **do not** use a fuel screen and are not affected by this service document. In addition, these assemblies may have multiple part numbers due to configuration, however they may be identified by the rectangular base body that is distinctly separate from the air throttle body.

Table 1. Affected Engine Models and Technical Publications¹

Engine Model	Document Number	Date
ALL Continental AvGas Engines	M-0	September 2019
O-470-GCI	X30586	October 2013
GTSIO-520-C, D, F, H, K, L, M, and N	X30045	October 2013
IO-470-C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V, and VO	X30588	March 2013
TSIO-470-B, C, and D	X30033	August 2011
IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, and MB	X30039	October 2013
TSIO-520-A, C, G, H, M, P, R, and T	X30575	December 2012
TSIO-520-B, BB, D, DB, E, EB, J, JB, K, KB, L, LB, N, NB	X30574	October 2013
IO-550-A, B, C	M-16	July 2015
IO-550-D, E, F, L	X30605	October 2013
TSIOL-550-A	X30601	August 2011
TSIOL-550-C	OMI-15	October 2014

1. A copy of this bulletin must be inserted into the most current version of the applicable Maintenance and Overhaul manual (as listed); until the data is incorporated into the applicable Maintenance and Overhaul manual or M-0 (by revision) or the service document is retired.

III. 100-HOUR/ANNUAL INSPECTION AND SCHEDULED MAINTENANCE

Complete the augmented fuel screen maintenance (listed below) after completing the tasks listed in M-0, Standard Practice Maintenance Manual, Section 6-4.7.2. “Maintenance Preflight Inspection, steps 1 through 5.

NOTE: Reference the current Illustrated Parts Catalog (IPC) for the most current replacement part (see Parts Supersedure History at: <http://continental.aero/support/parts-supersedure-history.aspx>).

WARNING

Wear eye protection when cutting safety wire to avoid injury from flying debris.

1. Cut, remove, and discard the safety wire from the fuel screen assembly.
2. Remove the fuel plug and screen assembly (with gasket) from the fuel injection control assembly housing; discard the gasket (see Figure 1). If equipped with a fitting connector and flare tube cap assembly, remove the flare tube cap assembly from the fuel plug and screen assembly (i.e. IO-520-D or IO-550-D). Inspect the fuel screen for damage.
 - a. If the screen or plug threads exhibit damage, replace the fuel plug and screen assembly.
 - b. If the fuel plug and screen assembly appears to be serviceable, clean the fuel screen according to the instructions in M-0, Standard Practice Maintenance Manual, Table 12-1. Repeat the cleaning process until no debris remains in the screen.
 - c. If the screen cannot be cleaned successfully, replace the fuel plug and screen assembly.
3. Apply anti-seize lubricant (P/N 646943) sparingly to the male threads of the fuel plug and screen assembly, ensuring the screen material does not become contaminated.
4. Install the fuel plug and screen assembly (with new gasket) into the fuel injection control assembly housing by hand. If a flare tube cap assembly was removed (reference step 2., above, (i.e. IO-520-D or IO-550-D)), install into the fuel plug and screen assembly according to the latest version of M-0, 3-3.1. General Sealant Application Instructions.
5. Torque the fuel plug and screen assembly (with new gasket and, if equipped with flare tube cap assembly) to 120 - 130 in-lbs according to the latest version of M-0, Appendix B.

CAUTION: Never reuse safety wire.

6. Using new 0.032” safety wire; safety wire the fuel screen assembly to the anchor point on the fuel control assembly housing according to instructions in M-0, “Standard Practice Maintenance Manual, Table 3-8 (wire size), and Appendix C-3 (method).

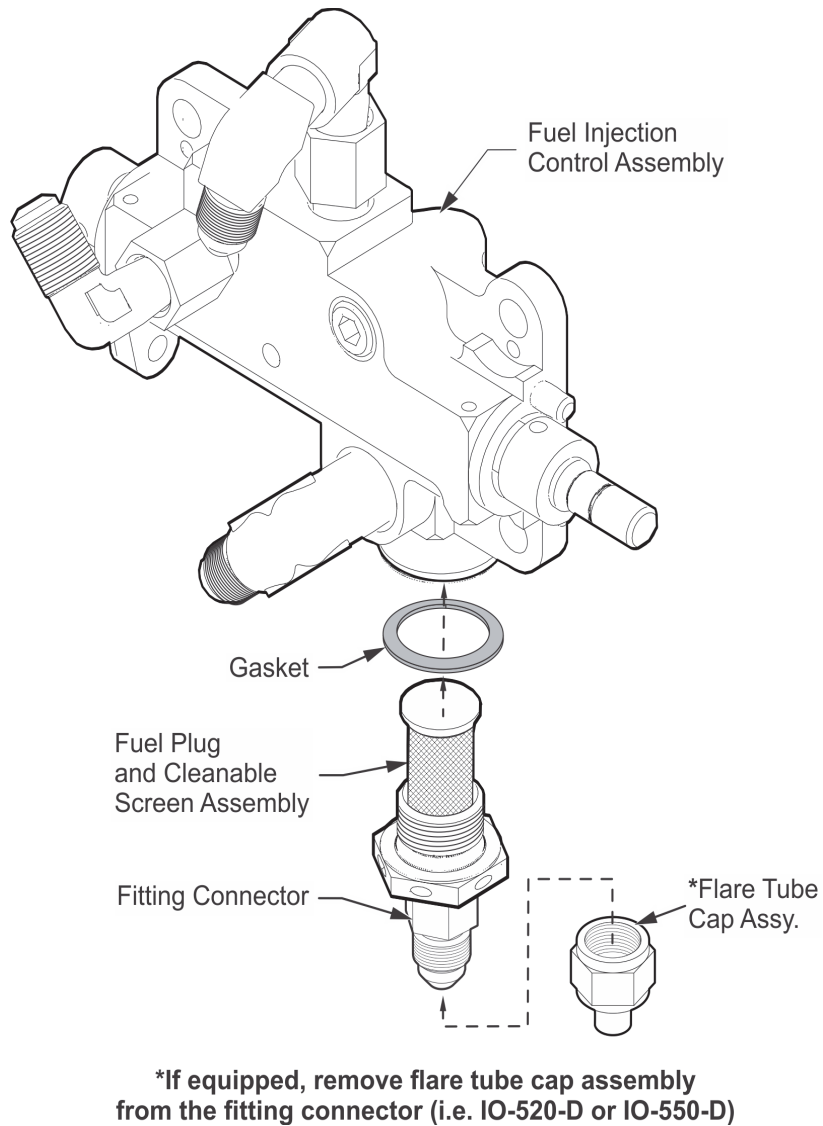


Figure 1. Fuel Injection Control Assembly - Exploded View, typical
(Shroud, levers, and hoses removed for clarity)

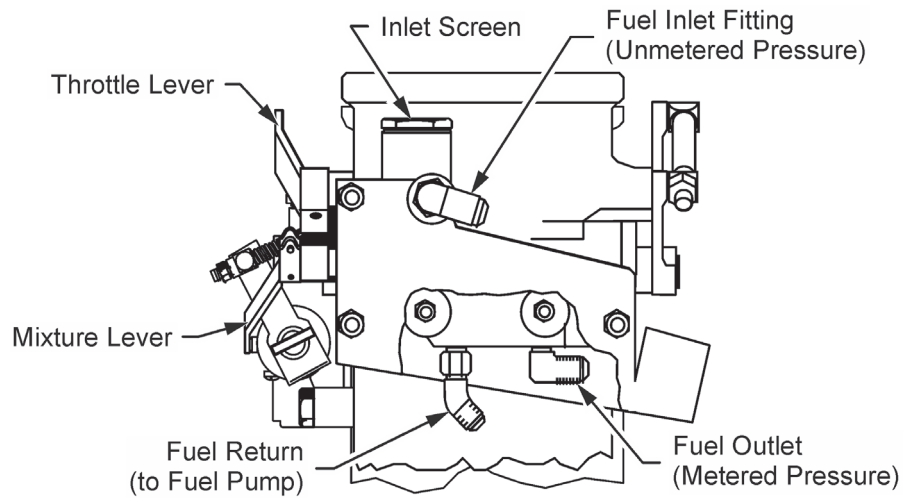


Figure 2. Affected Throttle and Control Assembly, typical

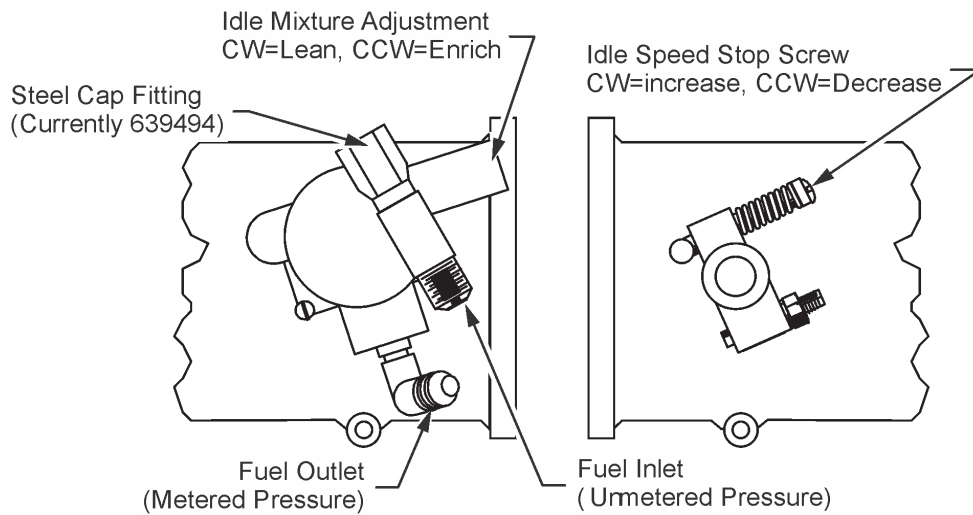


Figure 3. Metering Assembly - Not Affected, typical